

I claim:

Claim 1: In combination with a table saw comprising a table with a first work surface defining a first work area and first edge, a support for said table, a first connecting means on said edge and a saw carried by said table having a motor and saw blade, a removable power tool attachment comprising:

- (a) a table extension having a second work area and second edge, said table extension having a rectangular opening in said second work area,
- 10 (b) second connecting means on said table extension second edge for removably connecting said table extension to said first connecting means on said first edge, said first and second connecting means making said first and second work surfaces coplanar,
- 15 (c) a rectangular table extension insert plate having a third work surface and third connecting means, and fourth connecting means in said rectangular table extension opening for removably attaching said table extension insert plate to said table extension, said third and fourth connecting means making said second and third work surfaces coplanar,
- 20 (d) a power tool assembly having a dado cutting element, said power tool assembly having attachment means for attaching said power tool assembly to the bottom of said table extension insert plate, and adjustment means for vertically adjusting the position of said power tool assembly in relation to said table extension insert plate,
- 25 (e) a rectangular dado blade opening in said table extension insert plate through which said power tool dado cutting element may extend,
- (f) said dado cutting element comprising at least one dado blade mounted on a blade shaft, said shaft extending through an adjustment and bearing housing,
- 30 (g) adjustment means of said adjustment and bearing housing whereby said shaft may be vertically adjusted, such that said at least one

dado blade may extend above said second work area an adjustment range of zero inches to at least 3/4 inch,

(h) an electric motor and a mounting bracket, said mounting bracket supporting said electric motor and having said attachment means for attaching said power tool assembly to said table extension insert plate,

(i) stabilizing means of said mounting bracket, said blade shaft extending through said stabilizing means, said stabilizing means permitting vertical adjustment of said blade shaft and said at least one dado blade, throughout said adjustment range, and

(j) power transmission means whereby rotation of said motor causes rotation of said blade shaft, throughout said adjustment range of said blade shaft and said at least one dado blade,

whereby a user may use said power tool attachment in sequence with said table saw, without having to remove or replace said saw or power tool, and may adjust said power tool vertically to achieve a desired depth of cut in a workpiece, or to lower said power tool assembly completely below said second work area.

Claim 2: The combination according to claim 2, wherein said adjustment means comprises an adjustment screw extending to an adjustment port in said table extension insert plate, and extending through a threaded component of said adjustment and bearing housing.

Claim 3: The combination according to claim 2, wherein said power transmission means comprises a worm gear affixed to the shaft of said electric motor, a spur gear affixed to said blade shaft and engagement of said worm and spur gears.

Claim 4: The combination according to claim 3, wherein said power transmission means comprises a worm gear affixed to the shaft of said electric motor, a spur gear affixed to said blade shaft and engagement of said worm and spur gears.

Claim 5: The combination according to claim 2, wherein an adjustable fence guide may be adjusted to desired distances from said saw blade or said

cutting element, for guiding workpieces to said saw blade or said at least one dado blade.

5        Claim 6: The combination according to claim 3, wherein an adjustable fence guide may be adjusted to desired distances from said saw blade or said cutting element, for guiding workpieces to said saw blade or said at least one dado blade.

10        Claim 7: The combination according to claim 4, wherein an adjustable fence guide may be adjusted to desired distances from said saw blade or said cutting element, for guiding workpieces to said saw blade or said at least one dado blade.

      Claim 8: The combination according to claim 5, wherein an adjustable fence guide may be adjusted to desired distances from said saw blade or said cutting element, for guiding workpieces to said saw blade or said at least one dado blade.